

Polukarov, Yu. M. and Gorbunova, K. M.
SOME PROBLEMS IN THE THEORY OF THE
ELECTRODEPOSITION OF ALLOYS. I. METHODS
OF CALCULATING THE SHIFT IN THE DISCHARGE
POTENTIAL OF IONS AT THE EXPENSE OF THE
DISPLACEMENT ENERGY DURING THE FORMATION
OF AN ALLOY. [1961] 7p. 30 refs.

Order from OTS or SLA \$1.10

61-20966

Trans. of Zhur[na]l Fizicheskoi Khim[ii] (USSR)
1956, v. 30, no. 3, p. 515-521.

Another trans. is available from ATS \$13.45 as
ATS-76M44R [1960] 7p.

DESCRIPTORS: *Alloys, *Electrodeposition, Ions,
Motion.

The methods are discussed for calculating the shift in
the discharge potential of metallic ions taking place as
(Chemistry--Physical, TT, v. 7, no. 5) (over)

61-20966

- I. Polukarov, Yu. M.
- II. Gorbunova, K. M.
- III. Title: Methods ...

ATS-76M44R

ATS-RJ-2704

Office of Technical Services

Gas Permeability and Glass Temperatures of Polymers,
by G. M. Bartenev, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 3, 1956,
pp 532-536.

Assoc Tech Serv RJ-1449
" " " 91K24R
B

Sci - Chem

Apr 59

85,322

The Kinetics and Mechanism of the Sensitized Cracking
of Paraffinic Hydrocarbons, by A. D. Stepanukhovich, 18 pp.

RUSSIAN, par, Zhur Fiz Khim, Vol XXX, No 3, 1956,
pp 556-565.

SLA 59-10072

Sci - Chemistry
May 59
OTS V. I, No 8

88, 092

Fastovskii, V. G. and Petrovskii, Yu. V.
INVESTIGATION OF THE LIQUID-VAPOR EQUILIB-
RIUM IN THE OXYGEN-KRYPTON SYSTEM. [1962]
[7] p. 6 refs.

Order from OTS ca SLA \$1.10

62-20153

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1956,
v. 30 [no. 3] p. 589-592.

DESCRIPTORS: *Krypton, *Oxygen, *Chemical
equilibrium, Vapors, Liquids, *Liquefied gases,
Mixtures.

(Chemistry--Physical, TT, v. 9, no. 10)

62-20153

I. Fastovskii, V. G.
II. Petrovskii, Yu. V.

AEC BN 6 116

P911068367

Office of Technical Services

Methods of Comparative Computation of
Heat Effects. ~~18~~ by M. K. Karapet'yants,
21 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 593-607.

SLA R-2143

Sci

Aug 58

72,052

Thermal Activation and Deactivation of Adsorbed
Platinum Catalysts, by Zh. V. Smiral'nikova, et al,
12 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 3,
1956, pp 639-645.

SIA Tr R-110

Sci - Chem
Apr 1957

Jan 1957
46, 219

Investigation of Corrosion of Metals Using Heavy
Oxygen Isotope, by A. L. Brodskiy, A. S. Fomenko,
E. M. Abramova.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, pp 676-684.
1956,
A

Navy Tr 1547/NRL-639

Sci - Chemistry; Physics
Nov 57

53, 254

Holding of Fine Thermocouples by Short Current
Impulses, by A. G. Anikin. UNCLASSIFIED

RUSSIAN, per. Zhur Fiz Khim, Vol XXX, No 3,
1956, pp 685-687.

Sci Mus Lib 58/0205

Sci - Phys
Sep 58

73,401

Answer to G. K. Borenskov, by N. I. Kobozev.

RUSSIAN, Izv. Akad. Nauk SSSR, Ser. Fiz. Khim., Vol XXX, No 3, 1956,
IP 700-703. 6076/80

ATS RJ-1111

Sci - Phys, Chem
Apr 60

114,497

The Magnitude of the Surface and the Catalytic
Activity of Platinum Deposited on Silica Gel, by
G. K. Borekov.

RUSSIAN, Izv. Akad. Nauk SSSR, Ser. Khim., No 3, 1956,
pp 704, 705/ 9076124

ATS RJ-1110

Sci - Phys, Chem
Apr 60 114, 496

Fluctuations of Diffusion Flames Arising in the
Laminar Regime of Fuel Flow, by A. I. Malakov,
No 3,
RUSSIAN, per, Zhur ~~File~~ Khim, Vol XIX, 1956, p 708.

AELDB-GB153

Sci

Aug 59
N

93,599

The Theory of Degenerate Branching. Part I.
Kinetic Equations of Reactions With Degenerate
Branching, by N. S. Enikolopyan.

RUSSIAN, per, Zhur Fiz Khim. Vol XXX, No 4,
1956, pp 769-783.

NIL M. 4893

Sci - Phys

Aug 62

201, 152

Investigations of the Influence of the Solvent on the
Reaction Rate of C_2H_5I I - Isotope Exchange at Pres-
sures of up to 2500 kg/cm^2 , by M. Gonikberg.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 4, 1956, pp
784-788.

CSIRO-335⁵

Sci

Aug 59

93,590

The Oxidation of Methane by Oxygen Atom Resulting
From the Decomposition of Ozone, by N. A.
Kleimenov, I. N. Antonova, A. M. Markevich, 5 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 4, 1956
pp 794-797.

CIA/FID X-2446

ATS/RT-719

Sci

Sci - Chemistry

Jun 57

48,691

A Study of the Kinetics of the Initial Stage of
Methane Oxidation, Catalyzed by Nitric Oxide,
by L. V. Karmilova, N. S. Enikolopyan, A. B.
Nalbandyan, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 4, 1956,
pp 798-810. (23J142)

Assoc Tech Sv 23J142
DSIR LK RTE 1638
SLA

54,447

Sci - Chemistry
Oct 57

ATS/RJ-718

The Mechanism of Decomposition of Methane, by
P. S. Shantarovich, B. V. Pavlov, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 811-820.

AEC Tr 2700

Sci - Chemistry
Jan 57 CTS

42,206

CTC to CTS 82-14321

Kazanski, V. B., Mardaleishvili, R. E. and others.
DETERMINATION DE LA CONSTANCE DE VITESSE
DE DISSOCIATION DE L'HYDROGENE A LA SUR-
FACE DU PALLADIUM D'APRES LES DONNEES SUR
LA DIFFUSION A TRAVERS LE PALLADIUM
(Determination of the Dissociation Velocity Constant
of Hydrogen at a Palladium Surface from Data on
Diffusion Depth in Palladium) tr. by Mme. Bourrely.
27 Oct 59 [16] p. 5 refs. CEA Trans. no. R 204
(text in French)

Order from OTS or SLA \$1.60 61-23763

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1956, v. 30, no. 4, p. 822-823.

DESCRIPTORS: *Palladium, *Hydrogen, *Diffusion,
Gas diffusion, *Dissociation.

(Chemistry--Physical, TT, v. 6, no. 6)

61-23763

I. Kazanski, V. B.
II. Mardaleishvili, R. E.
III. CEA-tr-R204
IV. Commissariat à l'Énergie
Atomique (France)

176678

Office of Technical Services

/Kinetic Characterization of Hydroperoxides as
Intermediate Reaction Products of the Oxidation
of n-decane, by L. S. Vartanyan, Z. K. Maizus,
B. M. Emanuel, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 4,
1956, pp 856-861.

FTS RJ-837
Assoc Tech Serv 75J16R

Jul 58

70,003

The Sequence of Product Formation in the
Oxidation of Decane, by L. S. Vartanyan,
E. K. Maizus, et al.

RUSSIAN, per, Zhurnal Fizicheskoi
Khimii, Vol XXX, No 4, 1956, pp 862-870.

SLA TT 64-3002139

May 67

327,188

Study of the Glass Electrode by the Method of
Radioactive Indicators. II. Behavior of the Glass
Electrode in the Alkaline Region, by N. A. Izmailov,
A. G. Vassiliev, 28 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956, pp 1500-
1512.

ASC CEA Tr R227

Reverse Trans Russian to French
Feb 59

Polukarov, Yu. M. and Gorbunova, K. M.
SOME PROBLEMS IN THE THEORY OF THE
ELECTRODEPOSITION OF ALLOYS. II. AN IN-
VESTIGATION OF THE SHIFT IN THE DISCHARGE
POTENTIAL OF IONS DURING THE FORMATION
OF AN ALLOY. [1961] 7p. 8 refs.
Order from OTS or SLA \$1.10

61-20967

Trans. of Zhur[nal] Fiz[icheskoi] Khim[ii] (USSR)
1956, v. 30, no. 4, p. 871-877.
Another trans. is available from ATS \$13.65 as
ATS-77M44R [1960] 7p.

DESCRIPTORS: *Alloys, *Electrodeposition, Ions,
Motion.

It was established that the ennoblement (becoming
more positive) of the deposition potential (ΔE_{alloy})
of a metal during its entry into the alloy coincides
(Chemistry--Physical, TT, v. 7, no. 5) (over)

61-20967

- I. Polukarov, Yu. M.
- II. Gorbunova, K. M.
- III. Title: Investigation. . .

ATS-77M44R
ATS-RJ-2705

Office of Technical Services

Polukarov, Yu. M. and Gorbunova, K. M.
SOME PROBLEMS IN THE THEORY OF THE ELEC-
TRODEPOSITION OF ALLOYS. III. CONDITIONS
FOR THE EQUALIZATION OF POTENTIALS OF
METAL SEPARATION AT THE EXPENSE OF EN-
ERGY LIBERATED DURING THE FORMATION OF
AN ALLOY. [1961] 4p. 2 refs.
Order from OTS or SLA \$1.10

61-20968

Trans. of Zhur[nal] Fiz[icheskoi] Khim[ii] (USSR)
1956, v. 30, no. 4, p. 878-881.

Another trans. is available from ATS \$8.00 as
ATS-78M44R [1960] 4p.

DESCRIPTORS: *Alloys, *Electrodeposition. Metals,
Separation, Energy, Metallurgical analysis.

The problem of the relationship between the mag-
nitudes of the shift in the ion discharge potential of
(Chemistry--Physical, TT, v. 7, no. 3) (over)

61-20968

- I. Polukarov, Yu. M.
- II. Gorbunova, K. M.
- III. Title: Conditions . . .

ATS-78M44R
ATS-RJ-2706

Office of Technical Services

Inhibition of Diffusion of Hydrogen Into Iron and
Steel by Surface Deposits of Certain Metals in
Electrolytic Pickling, by L. I. Freiman, V. A.
Titov.

RUSSIAN, per Zhur Fiz Khim. Vol XXXI, 1956, No 4,
pp 892-898.

Henry Drutcher *T-4087*
\$7.75
ARC Tr 2885
SIA R-1975

Sci - Chem

Jun 58

66,124

A Gold Calorimeter with a Sensitivity of 0.00005°
for Studying the Thermochemistry of Solutions. The
Heat Capacity of Cesium Iodide Solutions to 0.03
Per Cent, by A. F. Kapustinskiy, I. I. Lipilina and
O. Y. Samoilov, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956, pp 896-
900.

DD-0-3 30-1-1000
SLA R-2239

Sci

Aug 58

72,174

Polarisation in the Electrodeposition of
Nickel from Nickel Chloride Solutions in
Water-Alcohol Mixtures, by S. V. Gorbachev,
Y. N. Yurkevich.

RUSSIAN, per, Zh. Fiz. Khim., Vol 30, No 4,
1956, pp 922-927.

NLL Ref: 9022.4 (68/100)

Sci-Phys
Jan 69

372,601

Kinetics and Mechanism of Hydrocarbon Decomposition. I. Acetylene Sensitized Cracking of Ethane, by A. M. Stepukhovich, M. G. Kaplan.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI, No 4, 1956, pp 928-933.

Instl Res Council, Canada
IT No 750

Sci - Chem

Apr 60

112,631

The Preparation of Fused Tantalum Carbide, by
V. I. Smirnova, B. F. Ormont, 5 pp.

RUSSIAN, per; Zhur Fiz Khim, Vol XXVI, 1956,
pp 958-960.

AEC Tr 2965
SIA R-1749

Sci
Aug 58

70,354

Storage of Light Energy by Photochemical Reactions
of Chlorophyll and its Analogs, by A. A. Krasnovskii,
26 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 968-985.

SLA Tr R-1370

Sci

Jun 58

65, 828

Mechanism of Sensitization of the Internal Photo-
electronic Effect of Silver and Thallium Iodide
Salts With Organic Dyes, by I. A. Akimov, 18 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XX, No 5, 1956,
pp 1007-1018.

CIA/FDD XX-511

CSIRO

NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Physics
Oct 58

SLA R-4237

IAC INTERNAL USE ONLY

74,058

Surface Chemical Combination of Silica With Methanol
and Its Photodissociation, by L. N. Kurbatov, 9 ppl
UNCLASSIFIED

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 5, Moscow,
May 1956, pp 1062-1066.

US JPRS/DC-L-304

Sci - Chem
May 58

64, 190

Investigation of Orientation in High Polymers. I.
Amorphous Polymers, by Yu. S. Lipatov, et al.

RUSSIAN, Zhur Fiz Khim, Vol XXX, No 5, 1956,
pp 1075-1081.

Assoc Tech Sv
\$6.95 Tr RJ-811

Sci - Chemistry
Aug 57

51,741

Methods of Comparative Computation of
Heat Effects. II, by M. K. Karapet'yants,
17 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX,
1956, pp 1104-1117.

SLA R-2144

Sci

Aug 58

72,053

A Mass Spectrometric Isotopic Analysis of Boron
Trifluoride, by G. M. Panchenkov, V. D. Moiseyev,
13 pp.

RUSSIAN, no pe, Zhur Fiz Khim, Vol XXX, 1956,
pp 1118-1125.

AEC Tr 2974

52,435

Sci - Physics
Sep 57

LA R-1757

Methods and Techniques of Physicochemical Investigations. A Method of Studying the Reaction of Isotopic Exchange of Hydrogen in Liquid Deuterium Bromide, by V. R. Kalinachenko, Ya. M. Varshavskiy (Varshavsky), A. I. Shatenshtein, 7 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, 1956, pp 1140-1143.

SLA R-1757

AEC Tr 2976

3-2, 438

Sci - Physics
Sep 57

Thermodynamically Equivalent Concentrations of
Nitric Oxide, by E. N. Eremin, A. N. Mal'tsev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 5, 1956,
pp 1179-1181.

ATS RJ-1268

Sci - Phys, Chem
Apr 60

114,570

The Existence of Higher Hydrogen Peroxide, by L. I.
Nekrasov, I. I. Skorokhodov,

RUSSIA, per, Zhur Fiz. Khim., Vol. XXX, No 5, 1956,
pp 1189-1190 . CIA 9004655

TIL No 4770

Sci - Chemistry

48, 478

Investigation of Orientation in High Polymers. II
Crystalline Polymers, by Yu. S. Lipatov, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 6, 1956,
pp 1202-1206.

Assoc Tech Sv
\$7.00 Tr RJ-812

Sci - Chemistry
Aug 57

51,742

S-2945

Physicochemical Study of the System $H_2O - SO_2$.
Part II, by G. P. Luchinskiy.

RUSSIAN, per, Zhur Fiz Khim Vol. XXX, No 6, 1956,
pp 1207-1222.

14/11/57

PTI RT-1142

Peroxide Products in the Catalysis of H_2O_2
by Barium and Molybdenum Salts II, by G. A.
Bogdanov, T. I. Berkenheim.

RUSSIAN, par, Zhur Fiz Khim, Vol XXX,
No 6, 1956, pp 1223-1227.

CSIRO

Sci - Chem

May 62

196,742

Refractometric Method for Investigating
the Diffusion Process and its Application
to Studies of the Diffusional Dissolution
of CuSO_4 , by S. V. Gorbachev and E. I.
Grabova, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 1228-1237.

SIA R-2258

Sci

Aug 58

72,165

Samsonov, G. V. and Golubeva, N. K.
 THE MECHANISM OF AND RULES GOVERNING
 THE OXIDATION OF HARD HIGH-MELTING TI-
 TANUM COMPOUNDS (Mekhanizm i Zakonomernosti i
 Mekhanizm Oksidatsii Tverdykh Tugoplavkikh
 Soedinenii Titana). Sep 61 [14p. 15 refs. RTS 1944.
 Order from OTS or SLA \$1.60 61-28160

Trans. of Ch[urash] Fiz[icheskoi] Kalm[ii] (USSR) 1956
 v. 30, no. 6, p. 1258-1266.

DESCRIPTORS: *Titanium compounds, *Carbides,
 *Nitrides, *Oxides, Oxidation, Temperature, Hard-
 ness, *Oxides, Chemical analysis, X-ray diffraction
 analysis, Electron diffraction analysis.

It has been found that the oxidation isotherms for dense
 compacted specimens of titanium carbide and nitride
 consist of two sections, an initial curved section
 (Chemistry-Physical, TT, v. 6, no. 12) (over)

61-28160

- I. Samsonov, G. V.
- II. Golubeva, N. K.
- III. RTS-1944
- IV. Department of Scientific
 and Industrial Research
 (Ct. Brit.)

Office of Technical Services

Kinetics and Mechanism of Hydrocarbon Decomposition.
III. Cracking of Butane Sensitized by Azomethane,
by A. D. Sterukhovich, E. E. Nikitin, 13 pp.

RUSSIAN, per, Zhur Fiz. Khim, Vol XIX, No 6, 1956,
pp 2 1291-1296.

SLA R-3106

Sci

Jul 59

92, 434

Photodesorption and Photodissociation of Metal-Absorbed Molecules, by P. Ye. Val'nev, 19 pp.

RUSSIAN, per, Zhur Kiz Khim, Vol. XXX, No 6, Jun 1956, pp 1308-1315.

Sci - Physics
Jul 57

*ATIC F-TS-9206/III

CIA/ELC XX-1487

49 286
USIE ITC-1487

Limits of Homogeneity and Dependence of
Thermodynamic and Certain Other Properties
of Tantalum Carbide Phases on Their Composi-
tion and Structure, by V. I. Sainova,
B. F. Grunt, 26 pp.

~~XAX~~
RUSSIAN, no per, Zhur Fiz Khim, Vol ~~XIX~~, ~~No 30~~;
1956, pp 1327-1342.

AEC Tr 2852

Sci - Chemistry
Apr 57 GIB/dex

47,134

Kinetics and Mechanism of the Decomposition of
Nitric Oxide, by A. I. Rozlovskiy, 11 pp.

RUSSIAN, no per, Zhur Fiz Khim, No 6, 1956,
pp 1349-1355, Enci to IR-1789-57, AFCEM-1A1.

SKAR-1116
AF 1138369

Sci - Chem
Nov 57

55, 380

(15-0000).

10/

The Production of ^{15}P Concentrates in a Simple
Apparatus by the Chemical Exchange Method, by E. V.
Kudachen, M. M. Averb, 18 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol 1954, No 6, 1955,
pp 1356-1360.

JPRS 3123

Sci - Chem
Apr 60

X-4150 112,884

Calculation of the Results of Experiments on the
Isotopic Exchange of Hydrogen, by Ya. M. Varshav-
sky, V. B. Kalinchenko, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XX, No 6,
1956, pp 1316-1319.

CIA/FDD K-4149
JPRS 3112

Sci - Physics
Mar 60

110,202

Boldirev, V. V. and Sakovich, G. V.
FLOATING (BALL) SCALES FOR THE STUDY OF
REACTION KINETICS WITH THE PARTICIPATION
OF SOLID SUBSTANCES. [1961] 6p. (2 figs.
omitted) 4 refs.
Order from OIS or SLA \$1.10

62-10191

Trans. [Zhurnal Fizicheskoi Khimii] (USSR) 1956,
v. 30, no. 6, p. 1416-1418.

DESCRIPTORS: *Balances, *Reaction kinetics,
Measurement, Electrochemistry, Solids.

(Chemistry--Physical, TT, v. 7, no. 9)

62-10191

- I. Title: Floating ball scales
1. Boldirev, V. V.
II. Sakovich, G. V.

Office of Technical Services

High-Temperature Aluminum-Oxygen Galvanic
Cell, by E. M. Antipin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 1425-1426.

Consultants Customs Tr

REF-284B

\$10.50

Sci - Electron

Mar 59

83,464

Electrochemical Investigation of Properties
of Surface Oxygen Compounds on Silver, by I. N.
Pospelova, A. A. Rakov, S. Ya. Pshezhetskiy,
5 pp.

Full tr

RUSSIAN, no per, Zhur Fiz Khim, Vol XX, No 7,
1956, pp 1433-1437.

RAE [unclear] 1969

NLL 111.2772
Navy Tr 1445/MRL 598

Sci - Physics
Jaz. 1957 CTS/dex Mar

45, 465
T-1657

Combustion of Mixtures of Nitric Acid and Hydrogen,
by A. I. Rozlovskiy.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 7, 1956,
pp 1444-1451.

T.I.L. Tr 4796

Sci - Chemistry
Jun 57

48,859

On the Question of the Potential Difference at the
Gas-Water Boundary, by A. N. Frankin, Z. A. Iofa, M. A.
Gerovich, 28 pp.

RUSSIAN, per, Zhur Fiz Khim (USSR), Vol XXX, 1956,
pg 1455.

REC'D PT-200
SLA 59-12883

Sci - Phys
OTS I, 9
Jun 59

89,530

Electroconductivity of the Oxides of Group II Metals
of Mendeleev's Periodic System. by A. P. Nakhodnova.
RUSSIAN, per. Libur Fiz Khim, Vol XXX, No 7, 1956,
pp 1469-1472.
•A111

Sci-Hist & Hist
Apr 68

Electroconductivity of the Oxides of Group II
Metals of Mendeleev's Periodic System, by A. P.
Bakholdinov,

RUSSIAN, per, Izv. Fiz. Khim., Vol. XX, No. 7,
1956, pp. 1469-1472.

Morris D. Friedman-M101

\$2.50

NUC/RTS 1959

Sci
Aug 58

61-78914

*AEC

68,589

Calculation of Thermodynamic Constants of Unsaturated Halides From the E.M.F.'s and Temperature Coefficients of Chemical Cells and Daniel-Jacobi Cells, by B. P. Markov, 7 pp.

RUSSIAN, per, / Zhur Fiz Khim, Vol XXX, 1956, pp 1537-1539.

AEC Tr 2594

Sci - Chemistry
Jan 57 CTS

42,198

Agency: **Flotilnyy Arsenal**
P.O. No. **8-70 b**

R-10582-D
10 July 69

Title: **Unknown: pp. 1615 to 1622. 8pp**

Author: **I.H. Epsman & A.H. Matus. (E.H. Epsman, et al)**

Source: **Zh. Fiz. Khim. Vol. 30 (1956).**

Language: **Russian.**

Special instruction: **Please translate & type 1 copy only**

STATIONARY CONCENTRATIONS OF NITROGEN OXIDE IN DISCHARGE

Studies of the Pore Structure of Solids by
Adsorption Methods. 1. Analysis of Various
Methods for Computing the Distribution of Pore
Volume, by M. M. Dubinin, 23 pp.

RUSSIAN, per Zhur Fiz Khim, Vol XXX, 1956, pp
1652-1661.

SLA R-2025
(AEC Tr 3008)

71,184

Sci
Aug 58

S-81/60

(NY-3549)

The Concentration of Isotopes C^{13} and C^{18} in
Carbon Monoxide by the Thermal Diffusion Method,
by G. M. Panchenkov, V. D. Moiseyev, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 7, 1956,
pp 1662-1667.

JFR3 2479

Reverse Trans RUSSIAN to FR
AEC/CEA-Tr-R279

Sci - Chem
May 60

116,488

The Use of a Polarograph for the Automatic Recording
of Polarization Curves in Fused Salts, by L. N.
Antipin, Yu. B. Kholtanakikh, S. F. Vashen, 8 pp.

RUSSIAN, par, Zhur Fiz Khim, Vol XXX, 1956,
pp 1672-1675.

AEC Tr 2695

Sci - Chemistry
Jan 57 CTS

ASLIB GB45
42,199

Kinetics and Mechanism of the Decomposition
of Hydrocarbons. VIII. The Influence of
Addition of Butylene on the Kinetics of Cracking
of Alkanes, by A. P. Stepukhovich, Krol',

RUSSIAN, no per, Zhur Fiz Khim, Vol XX, No 8,
1956, pp 1718-1726.

Tech and Comm
\$40.00

Sci - Chem
Jul 57

49,234

61-20736

Kochergin, S. M. and Nikulin, V. N.
CRYSTALLITE ORIENTATION IN ELECTROLYTIC
TIN DEPOSITS. [1961] 3p. (4 figs. omitted) 8 refs.
Order from OTS or SLA \$1.10 61-20736

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1956,
v. 30, p. 1727-1728.

DESCRIPTORS: *Electrolytes, *Tin, *Deposits, Crys-
tal structure, Electrolysis, Electrodeposition.

Electrolytic tin deposits can be produced both with a
disoriented placement of crystallites and with a
markedly pronounced axial texture. Deposits produced
in stannate electrolytes have a weak orientation of the
crystallites; it improves with smaller grains and
reaching a sufficient thickness of the deposit. The
texture is clearly seen when the deposition is made in
a sulphate electrolyte. When the grain size decreases
(Chemistry-Physical TT: v. 7, no. 9) (over)

I. Kochergin, S. M.
II. Nikulin, V. N.

Office of Technical Services

On the Composition of Rust Formed on Iron Exposed
to Water and Air, by I. V. Krotov.

RUSSIAN, per, Zhur Fiz. Khim, Vol XXX, No 8, 1956.

Navy Tr 1505/HRL 609

Sci - Chem

50, 455

Jul 57

The Oxidation of Sulfur Dioxide on Activated
Carbon With the Liquid-Contact Method, by
E. K. Obchinnikova, Davtian.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1735-1738.

Tech and Comm
\$40.00

Sci - Chem
Jul 57

49,233

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1735-1738.

The Influence of the Addition of Metal-Oxides
on the Reduction of Mn_2O_4 With Carbon, by
D. Averbukh, Gmufarov.

RUSSIAN, no par, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1739-1745.

Tech and Comm
\$55.00

Sci - Chem

49, 235

The Reciprocal Solubility of Polymers. II.
The Viscosity of Rubber Mixture and the Behavior
of Their Solutions, by G. L. Slonimskiy,
Komsakaya,

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1746-1751.

Tech and Comm
\$50.00

49,236

Sci - Chem
Jul 57

Copolymerization of Unsaturated Compounds. I.
Study of Copolymerization of Isoprene With
Styrene, by E. Lipatova, et al.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1752-1759.

Tech and Comm

\$75.00

Sci - Chem
Jul 57

49,235

Adsorption Potential of Concentrated Solutions
of Inorganic Acids, by B. S. Gurenikov. USSR

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 1830-1839.

DSIR Leading Library Unit
M. 174

Sci - Chem
Apr 59

85,099

Dubinin, M. M. and Zhukovskaya, Ye. G.
STUDY OF THE POROUS STRUCTURE OF SOLIDS
BY SORPTION METHODS. II. COMPARISON OF DIFFERENT
METHODS OF CALCULATING PORE-VOLUME AND SURFACE
DISTRIBUTION WITH RESPECT TO SIZE FOR SORBENTS ON
TYPICAL EXPERIMENTAL MATERIAL. [1961] 12p.
Order from ATS 517.40

ATS-98N50R

Trans. of Zhur[un] Fiz[icheskoy] Khim[ii] (USSR)
1956, v. 30, no. 8, p. 1840-1851.

DESCRIPTORS: Solids, *Porous materials, *Porosity,
*Adsorption, Adsorbents, Test methods.

OTS 62-16188

(Chemistry--Physical, TT, v. 6, no. 2)

61-22376

I. Dubinin, M. M.
II. Zhukovskaya, Ye. G.
III. Title: Comparison...
IV. ATS-98N50R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/AJ-9026

103550

Office of Technical Services

Study of the Mechanism of Catalytic Hydrogenation
of Organic Sulfur Compounds on Iron-Chromium
Catalysts by the Method of Marked Atoms. I.
Study of the Catalytic Hydrogenation of Carbon
Disulfide and Thiophene, by F. P. Ivanovskiy,
et al.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXX, No 8,
1956, pp 1860-1866.

07-57-10890A \$60.00
Tech and Comm
\$60.00

Sci - Chem
Jul 57

49,237

S-86/60

(NY-3548).

The Concentration of a Heavy Isotope of Nitrogen
by Thermal Diffusion, by B. A. Geller, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956,
pp 1871-1876.

JPRS 2458

Sci - Chem
Apr 60

112, 624

Remark on the Dependence of the Hydrogen Over-voltage on the Nature of the Cathode in Connection with the Work of Ruetschi, by M. I. Temkin and A. N. Frumkin, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956, pp 1885-1888.

SIA R-2016

Sci

Aug 58

71,218

Some Shortcomings in the Development of Chemical
Thermodynamics for Phases with a Variable
Composition, by H. P. Ormont, 7 p.

RUSSIAN, Izv. Akad. Nauk Khim., 1956, Vol XXX, No 8,
pp 1896-1899.

SLA 59-17598

S-1
Feb 60
Vol 2, No 10

108,842

On the Question of the Preparation of Specific
Adsorbents, by Z. A. Vynotskiy, M. V. Polyakov,
6 pp. UNCLASSIFIED

RUSSIAN, per, Zhurnal Fizicheskoy Khimii, Vol
30, No 8, 1956, pp 1901-1902.

ATIC F-TS-9485/III

Sci - Chem
Jul 58

66,427

Experimental Confirmation of the Presence of the
Oxonium form of Ethylene Oxide in Aqueous Solutions,
by P. V. Zinakov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 8, 1956,
pp 1901-1905.

CSIRO 3441

Sci
Apr 59

84, 472

Investigation Into the Effect of Chemical Services
by B. A. Krotova et al. 70

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9,
1956, p 1921.-1931.

Co-Op Tr Sch Tr 101

Sci - Chemistry
Nov 57

Do not, usually, follow
55,104 (CSIRO)
CSIRO

Topoanalytical Investigations of Equilibrium
Diagrams for Multicomponent Eutectic Systems
Part I, by L. S. Palatnik, I. M. Kopeliovich, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIX, 1956, pp 1948-
1958. *NO 7*

AEC Tr 3292

Sci - Phys

ATS/RS-3480

Sep 58

73, 772

Kolotyrskiy, Ya. M. and Knyasheva, V. M.
ON THE ELECTROCHEMICAL BEHAVIOR OF
METALS IN THE PASSIVE STATE. [1960] 13p

On the electrochemical behavior of metals in the passive state

Trans. of Journal Electrochemistry (USSR) 1956
v. 3, no. 5, p. 1090-1102

The behavior of nickel and chromium electrodes in a peroxide sulfate passivating solution was investigated by measuring anodic solution rates at constant potential. Passivation of the electrode, accompanied by a change in the character of the potential dependence of the solution rate, was observed only in a definite polarization region, depending on the nature of the electrode metal. At potentials above this region the solution kinetics correspond to the Tafel equation. The hypothesis is advanced that passivation of Ni and Cr in sulfate solutions is the result of activated adsorption of the oxygen of the water on their surfaces. (Chemistry--Physical. TT, v. 5, no. 7) (over)

62-1535

1. Electrochemistry
2. Chromium-nickel alloys--Corrosion
3. Chromium--Corrosion
1. Kolotyrskiy, Ya. M.
- II. Knyasheva, V. M.
- III. Abstracts
- IV. Translation, New York

148,739

AEU-4350

Office of Technical Services

S-20/60

(NY-3547).

The Separation of Stable Isotopes of Carbon by the
Counter Flow Chemical Exchange Method in the
Gaseous Phase, by G. M. Panchankov, I. A. Semlokbin,
A. G. Maurina, N. P. Yershova, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol 32, No 9, 1956,
pp 2070-2076.

JPRS 2455

Sci - Chem
Apr 60

112,618

Magnetochemistry of Active Centers. 2. Catalytic
Properties of the Amorphous and Crystalline Phases
of Metallic Catalysts, by I. V. Krylova, W. I.
Kobozov, 8 pp,

RUSSIAN, per, Zhur Fiz Khim, Vol. XXX, No 9, 1956,
pp 2077-2084.

Sci Mus Lib Tr 57/2822

Sci - Chem
Mar 58

59,779

3-83/60

(NY-3547).

The Temperature Relationship of the Coefficient
of Nitrogen Isotope Separation During the
Chemical Exchange Between Ammonia and a
Solution of Ammonium Nitrate, by V. Yu.
Orlov, N. M. Tunitsky, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9,
1956, pp 2085-2089.

JPRS 2474

Sci - Chem
Apr 60

113,845

Hydrogen Exchange Between Aromatic Hydrocarbons
and Liquid Deuterium Bromide, by A. I. Shatenshtein,
R. V. A. Kuzinchenko, Ya. M. Vershavskiy, 8 pp.
UNCL

Vol XXX,
RUSSIAN, per, Zhur Fiz Khim, No 9, pp 2093-2097.

Sci Mus Lib 58/1910

AERE 781

Sci - Chem
Mar 59

83,402

Hydrogen Exchange Between Benzene and Naphthalene
Derivatives and Liquid Deuterium Bromide, by A. I.
Shatenstein, V. R. Kalinachenko, Ya. M. Varchav-
skiy, 11 pp. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 9, 1956,
pp 2058-2105.

Sci Mus Lib 58/1911

Sci - Chem
Mar 59

83,403